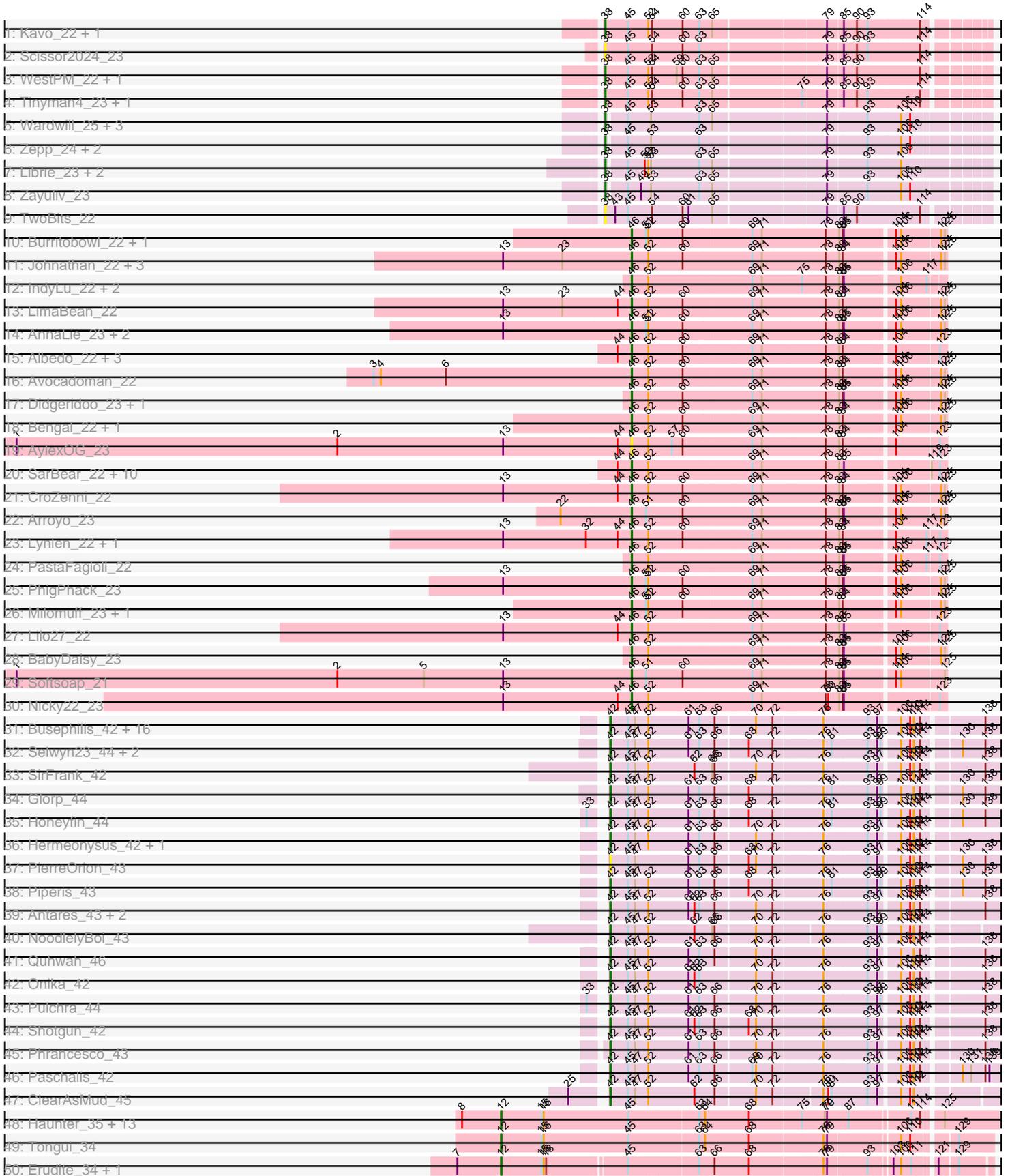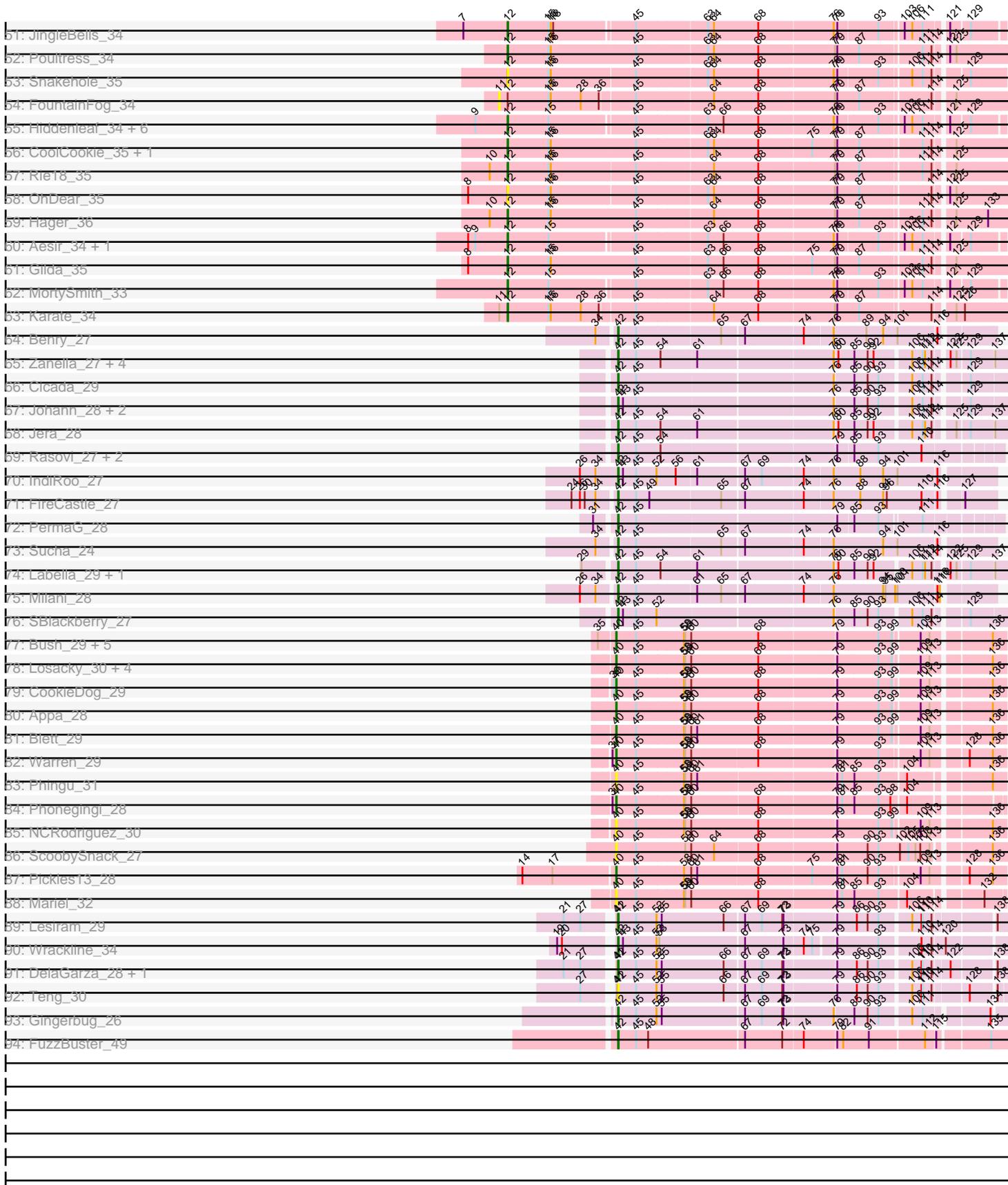# Pham 290873

Pham 290873

Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. If this default region is judged to be packed too tightly with annotated starts, the track will be further scaled to only show that region of the ORF with annotated starts. This action will be indicated by adding "Zoomed" to the title. For starts, yellow indicates the location of called starts comprised solely of Glimmer/GeneMark auto-annotations, green indicates the location of called starts with at least 1 manual gene annotation.

Pham 290873 Report

This analysis was run 03/28/26 on database version 641.

Pham number 290873 has 191 members, 36 are drafts.

Phages represented in each track:
• Track 1 : Kavo_22, Schimmels22_23
• Track 2 : Scissor2024_23
• Track 3 : WestPM_22, Penta_22
• Track 4 : Tinyman4_23, HerculesXL_23
• Track 5 : Wardwill_25, LilTerminator_23, QuadZero_23, Hasitha_23
• Track 6 : Zepp_24, GreenIvy_23, BaronJohn_24
• Track 7 : Librie_23, Fulton_23, CaptainRex_23
• Track 8 : Zayuliv_23
• Track 9 : TwoBits_22
• Track 10 : Burritobowl_22, DickRichards_22
• Track 11 : Johnathan_22, Albright_22, Doobus_22, Cashington_22
• Track 12 : IndyLu_22, Finalfrontier_23, Kate33_22
• Track 13 : LimaBean_22
• Track 14 : AnnaLie_23, BelmontSKP_23, SansAfet_22
• Track 15 : Albedo_22, Phisb_22, SirBeanington_22, BubbaBear_22
• Track 16 : Avocadoman_22
• Track 17 : Didgeridoo_23, Lahqtemish_22
• Track 18 : Bengal_22, Abigail_22
• Track 19 : AylexOG_23
• Track 20 : SarBear_22, Swervy_22, Slay_22, Jabb_22, Eula_22, MsUbiquitous_22, TukTuk_22, CupcakePrincess_22, Pecas_22, Jovita_22, QMacho_23
• Track 21 : CroZenni_22
• Track 22 : Arroyo_23
• Track 23 : Lynlen_22, Kenzers_22
• Track 24 : PastaFagioli_22
• Track 25 : PhigPhack_23
• Track 26 : Milomuff_23, Solea_24
• Track 27 : Lilo27_22
• Track 28 : BabyDaisy_23
• Track 29 : Softsoap_21
• Track 30 : Nicky22_23
• Track 31 : Busephilis_42, CrazyRich_42, Ramiel05_42, Lucretia_43, Kowalski_42, Ganandorf_42, BeagleBug_42, Cranjis_44, KaiHaiDragon_43, EarickHC_43, Crisis_44, Jollipop_43, PhedwardCullen_41, Savannah_42, Phorgeous_42, LittleFortune_44, PiperSansNom_43
• Track 32 : Selwyn23_44, Jefe_43, Yeti_43
• Track 33 : SirFrank_42

- Track 34 : Glorp_44
- Track 35 : Honeyfin_44
- Track 36 : Hermeonysus_42, Scumberland_44
- Track 37 : PierreOrion_43
- Track 38 : Piperis_43
- Track 39 : Antares_43, BrazzalePHS_42, Rockwell_42
- Track 40 : NoodlelyBoi_43
- Track 41 : Quhwah_46
- Track 42 : Onika_42
- Track 43 : Pulchra_44
- Track 44 : Shotgun_42
- Track 45 : Phrancesco_43
- Track 46 : Paschalis_42
- Track 47 : ClearAsMud_45
- Track 48 : Haunter_35, Pharpay_35, NarutoRun_35, Kate_35, Anakin_35, Rachella_35, OverHedge_35, AnnaSerena_35, Potty_35, Tedro_35, Cybele_35, Neptune_35, Artiphact_35, Krampus_35
- Track 49 : Tongui_34
- Track 50 : Erudite_34, Dauntless_34
- Track 51 : JingleBells_34
- Track 52 : Poultress_34
- Track 53 : Snakehole_35
- Track 54 : FountainFog_34
- Track 55 : Hiddenleaf_34, Crestdrop_34, SilentWarrior_34, FreddieHg_34, Annapurna_34, DannyDe_34, Chivey_34
- Track 56 : CoolCookie_35, PhunaPhoke_35
- Track 57 : Rie18_35
- Track 58 : OhDear_35
- Track 59 : Hager_36
- Track 60 : Aesir_34, JDawG_34
- Track 61 : Gilda_35
- Track 62 : MortySmith_33
- Track 63 : Karate_34
- Track 64 : Benry_27
- Track 65 : Zanella_27, Alove_27, TurboVicky_27, Rootkit7_27, AyoTeo_29
- Track 66 : Cicada_29
- Track 67 : Johann_28, Olympi_29, Goodman_28
- Track 68 : Jera_28
- Track 69 : Rasovi_27, Linayshia_27, Htur_27
- Track 70 : IndiRoo_27
- Track 71 : FireCastle_27
- Track 72 : PermaG_28
- Track 73 : Sucha_24
- Track 74 : Labella_29, Typher_29
- Track 75 : Milani_28
- Track 76 : SBlackberry_27
- Track 77 : Bush_29, Antuna_29, Violeta_30, MenE_29, Carrillo_30, Dropshot_28
- Track 78 : Losacky_30, Jakelyne_31, Guzman_30, Winchester007_44, PhillyJawn_29
- Track 79 : CookieDog_29
- Track 80 : Appa_28
- Track 81 : Blett_29
- Track 82 : Warren_29

- Track 83 : Phingu_31
- Track 84 : Phonegingi_28
- Track 85 : NCRodriguez_30
- Track 86 : ScoobySnack_27
- Track 87 : Pickles13_28
- Track 88 : Mariel_32
- Track 89 : Lesiram_29
- Track 90 : Wrackline_34
- Track 91 : DelaGarza_28, Sweetums_28
- Track 92 : Teng_30
- Track 93 : Gingerbug_26
- Track 94 : FuzzBuster_49

Summary of Final Annotations (See graph section above for start numbers):

The start number called the most often in the published annotations is 42, it was called in 56 of the 155 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
- Alove_27, Antares_43, AyoTeo_29, BeagleBug_42, Benry_27, BrazzalePHS_42, Busephilis_42, Cicada_29, ClearAsMud_45, Cranjis_44, CrazyRich_42, Crisis_44, DelaGarza_28, EarickHC_43, FireCastle_27, FuzzBuster_49, Ganandorf_42, Gingerbug_26, Glorp_44, Goodman_28, Hermeonysus_42, Honeyfin_44, Htur_27, IndiRoo_27, Jefe_43, Jera_28, Johann_28, Jollipop_43, KaiHaiDragon_43, Kowalski_42, Labella_29, Lesiram_29, Linayshia_27, LittleFortune_44, Lucretia_43, Milani_28, NoodlelyBoi_43, Olympi_29, Onika_42, Paschalis_42, PermaG_28, PhedwardCullen_41, Phorgeous_42, Phrancesco_43, PierreOrion_43, PiperSansNom_43, Piperis_43, Pulchra_44, Quhwah_46, Ramiel05_42, Rasovi_27, Rockwell_42, Rootkit7_27, SBlackberry_27, Savannah_42, Scumberland_44, Selwyn23_44, Shotgun_42, SirFrank_42, Sucha_24, Sweetums_28, Teng_30, TurboVicky_27, Typher_29, Wrackline_34, Yeti_43, Zanella_27,

Genes that have the "Most Annotated" start but do not call it:
-

Genes that do not have the "Most Annotated" start:
- Abigail_22, Aesir_34, Albedo_22, Albright_22, Anakin_35, AnnaLie_23, AnnaSerena_35, Annapurna_34, Antuna_29, Appa_28, Arroyo_23, Artiphact_35, Avocadoman_22, AylexOG_23, BabyDaisy_23, BaronJohn_24, BelmontSKP_23, Bengal_22, Blett_29, BubbaBear_22, Burritobowl_22, Bush_29, CaptainRex_23, Carrillo_30, Cashington_22, Chivey_34, CookieDog_29, CoolCookie_35, Crestdrop_34, CroZenni_22, CupcakePrincess_22, Cybele_35, DannyDe_34, Dauntless_34, DickRichards_22, Didgeridoo_23, Doobus_22, Dropshot_28, Erudite_34, Eula_22, Finalfrontier_23, FountainFog_34, FreddieHg_34, Fulton_23, Gilda_35, GreenIvy_23, Guzman_30, Hager_36, Hasitha_23, Haunter_35, HerculesXL_23, Hiddenleaf_34, IndyLu_22, JDawG_34, Jabb_22, Jakelyne_31, JingleBells_34, Johnathan_22, Jovita_22, Karate_34, Kate33_22, Kate_35, Kavo_22, Kenzers_22, Krampus_35, Lahqtemish_22, Librie_23, LilTerminator_23, Lilo27_22, LimaBean_22, Losacky_30, Lynlen_22, Mariel_32, MenE_29, Milomuff_23, MortySmith_33, MsUbiquitous_22, NCRodriguez_30, NarutoRun_35, Neptune_35,

Nicky22_23, OhDear_35, OverHedge_35, PastaFagioli_22, Pecas_22, Penta_22, Pharpay_35, PhigPhack_23, PhillyJawn_29, Phingu_31, Phisb_22, Phonegingi_28, PhunaPhoke_35, Pickles13_28, Potty_35, Poultress_34, QMacho_23, QuadZero_23, Rachella_35, Rie18_35, SansAfet_22, SarBear_22, Schimmels22_23, Scissor2024_23, ScoobySnack_27, SilentWarrior_34, SirBeanington_22, Slay_22, Snakehole_35, Softsoap_21, Solea_24, Swervy_22, Tedro_35, Tinyman4_23, Tongui_34, TukTuk_22, TwoBits_22, Violeta_30, Wardwill_25, Warren_29, WestPM_22, Winchester007_44, Zayuliv_23, Zepp_24,

Summary by start number:

Start 11:
• Found in 2 of 191 (1.0%) of genes in pham
• No Manual Annotations of this start.
• Called 50.0% of time when present
• Phage (with cluster) where this start called: FountainFog_34 (EF),

Start 12:
• Found in 38 of 191 (19.9%) of genes in pham
• Manual Annotations of this start: 34 of 155
• Called 97.4% of time when present
• Phage (with cluster) where this start called: Aesir_34 (EF), Anakin_35 (EF), AnnaSerena_35 (EF), Annapurna_34 (EF), Artiphact_35 (EF), Chivey_34 (EF), CoolCookie_35 (EF), Crestdrop_34 (EF), Cybele_35 (EF), DannyDe_34 (EF), Dauntless_34 (EF), Erudite_34 (EF), FreddieHg_34 (EF), Gilda_35 (EF), Hager_36 (EF), Haunter_35 (EF), Hiddenleaf_34 (EF), JDawG_34 (EF), JingleBells_34 (EF), Karate_34 (EF), Kate_35 (EF), Krampus_35 (EF), MortySmith_33 (EF), NarutoRun_35 (EF), Neptune_35 (EF), OhDear_35 (EF), OverHedge_35 (EF), Pharpay_35 (EF), PhunaPhoke_35 (EF), Potty_35 (EF), Poultress_34 (EF), Rachella_35 (EF), Rie18_35 (EF), SilentWarrior_34 (EF), Snakehole_35 (EF), Tedro_35 (EF), Tongui_34 (EF),

Start 38:
• Found in 19 of 191 (9.9%) of genes in pham
• Manual Annotations of this start: 13 of 155
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BaronJohn_24 (EA5), CaptainRex_23 (EA5), Fulton_23 (EA5), GreenIvy_23 (EA5), Hasitha_23 (EA5), HerculesXL_23 (EA11), Kavo_22 (EA11), Librie_23 (EA5), LilTerminator_23 (EA5), Penta_22 (EA11), QuadZero_23 (EA5), Schimmels22_23 (EA11), Scissor2024_23 (EA11), Tinyman4_23 (EA11), TwoBits_22 (EA5), Wardwill_25 (EA5), WestPM_22 (EA11), Zayuliv_23 (EA5), Zepp_24 (EA5),

Start 40:
• Found in 21 of 191 (11.0%) of genes in pham
• Manual Annotations of this start: 11 of 155
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Antuna_29 (GA), Appa_28 (GA), Blett_29 (GA), Bush_29 (GA), Carrillo_30 (GA), CookieDog_29 (GA), Dropshot_28 (GA), Guzman_30 (GA), Jakelyne_31 (GA), Losacky_30 (GA), Mariel_32 (GA), MenE_29 (GA), NCRodriguez_30 (GA), PhillyJawn_29 (GA), Phingu_31 (GA), Phonegingi_28 (GA), Pickles13_28 (GA), ScoobySnack_27 (GA), Violeta_30 (GA), Warren_29 (GA), Winchester007_44 (GA),

Start 42:
• Found in 67 of 191 (35.1%) of genes in pham
• Manual Annotations of this start: 56 of 155
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Alove_27 (EJ), Antares_43 (EC), AyoTeo_29 (EJ), BeagleBug_42 (EC), Benry_27 (EJ), BrazzalePHS_42 (EC), Busephilis_42 (EC), Cicada_29 (EJ), ClearAsMud_45 (EC), Cranjis_44 (EC), CrazyRich_42 (EC), Crisis_44 (EC), DelaGarza_28 (GF), EarickHC_43 (EC), FireCastle_27 (EJ), FuzzBuster_49 (GM), Ganandorf_42 (EC), Gingerbug_26 (GF), Glorp_44 (EC), Goodman_28 (EJ), Hermeonysus_42 (EC), Honeyfin_44 (EC), Htur_27 (EJ), IndiRoo_27 (EJ), Jefe_43 (EC), Jera_28 (EJ), Johann_28 (EJ), Jollipop_43 (EC), KaiHaiDragon_43 (EC), Kowalski_42 (EC), Labella_29 (EJ), Lesiram_29 (GF), Linayshia_27 (EJ), LittleFortune_44 (EC), Lucretia_43 (EC), Milani_28 (EJ), NoodlelyBoi_43 (EC), Olympi_29 (EJ), Onika_42 (EC), Paschalis_42 (EC), PermaG_28 (EJ), PhedwardCullen_41 (EC), Phorgeous_42 (EC), Phrancesco_43 (EC), PierreOrion_43 (EC), PiperSansNom_43 (EC), Piperis_43 (EC), Pulchra_44 (EC), Quhwah_46 (EC), Ramiel05_42 (EC), Rasovi_27 (EJ), Rockwell_42 (EC), Rootkit7_27 (EJ), SBlackberry_27 (EJ), Savannah_42 (EC), Scumberland_44 (EC), Selwyn23_44 (EC), Shotgun_42 (EC), SirFrank_42 (EC), Sucha_24 (EJ), Sweetums_28 (GF), Teng_30 (GF), TurboVicky_27 (EJ), Typher_29 (EJ), Wrackline_34 (GF), Yeti_43 (EC), Zanella_27 (EJ),

Start 46:
• Found in 46 of 191 (24.1%) of genes in pham
• Manual Annotations of this start: 41 of 155
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Abigail_22 (EB), Albedo_22 (EB), Albright_22 (EB), AnnaLie_23 (EB), Arroyo_23 (EB), Avocadoman_22 (EB), AylexOG_23 (EB), BabyDaisy_23 (EB), BelmontSKP_23 (EB), Bengal_22 (EB), BubbaBear_22 (EB), Burritobowl_22 (EB), Cashington_22 (EB), CroZenni_22 (EB), CupcakePrincess_22 (EB), DickRichards_22 (EB), Didgeridoo_23 (EB), Doobus_22 (EB), Eula_22 (EB), Finalfrontier_23 (EB), IndyLu_22 (EB), Jabb_22 (EB), Johnathan_22 (EB), Jovita_22 (EB), Kate33_22 (EB), Kenzers_22 (EB), Lahqtemish_22 (EB), Lilo27_22 (EB), LimaBean_22 (EB), Lynlen_22 (EB), Milomuff_23 (EB), MsUbiquitous_22 (EB), Nicky22_23 (EB), PastaFagioli_22 (EB), Pecas_22 (EB), PhigPhack_23 (EB), Phisb_22 (EB), QMacho_23 (EB), SansAfet_22 (EB), SarBear_22 (EB), SirBeanington_22 (EB), Slay_22 (EB), Softsoap_21 (EB), Solea_24 (EB), Swervy_22 (EB), TukTuk_22 (EB),

Summary by clusters:

There are 9 clusters represented in this pham: EA11, EJ, EF, EC, EB, GF, GA, GM, EA5,

Info for manual annotations of cluster EA11:
•Start number 38 was manually annotated 4 times for cluster EA11.

Info for manual annotations of cluster EA5:
•Start number 38 was manually annotated 9 times for cluster EA5.

Info for manual annotations of cluster EB:
•Start number 46 was manually annotated 41 times for cluster EB.

Info for manual annotations of cluster EC:
•Start number 42 was manually annotated 33 times for cluster EC.

Info for manual annotations of cluster EF:
•Start number 12 was manually annotated 34 times for cluster EF.

Info for manual annotations of cluster EJ:
•Start number 42 was manually annotated 18 times for cluster EJ.

Info for manual annotations of cluster GA:
•Start number 40 was manually annotated 11 times for cluster GA.

Info for manual annotations of cluster GF:
•Start number 42 was manually annotated 4 times for cluster GF.

Info for manual annotations of cluster GM:
•Start number 42 was manually annotated 1 time for cluster GM.

Gene Information:

Gene: Abigail_22 Start: 18166, Stop: 18915, Start Num: 46
Candidate Starts for Abigail_22:
(Start: 46 @18166 has 41 MA's), (52, 18208), (60, 18292), (69, 18460), (71, 18484), (78, 18640), (83, 18673), (84, 18682), (104, 18799), (106, 18811), (124, 18901), (125, 18910),

Gene: Aesir_34 Start: 22370, Stop: 23494, Start Num: 12
Candidate Starts for Aesir_34:
(8, 22271), (9, 22289), (Start: 12 @22370 has 34 MA's), (15, 22472), (45, 22673), (63, 22844), (66, 22883), (68, 22970), (76, 23147), (79, 23153), (93, 23249), (103, 23297), (106, 23315), (111, 23336), (121, 23381), (129, 23420),

Gene: Albedo_22 Start: 18037, Stop: 18792, Start Num: 46
Candidate Starts for Albedo_22:
(44, 18001), (Start: 46 @18037 has 41 MA's), (52, 18079), (60, 18163), (69, 18331), (71, 18355), (78, 18514), (83, 18547), (84, 18556), (104, 18673), (123, 18775),

Gene: Albright_22 Start: 17924, Stop: 18673, Start Num: 46
Candidate Starts for Albright_22:
(13, 17600), (23, 17750), (Start: 46 @17924 has 41 MA's), (52, 17966), (60, 18050), (69, 18218), (71, 18242), (78, 18398), (83, 18431), (84, 18440), (104, 18557), (106, 18569), (124, 18659), (125, 18668),

Gene: Alove_27 Start: 20472, Stop: 21353, Start Num: 42
Candidate Starts for Alove_27:
(Start: 42 @20472 has 56 MA's), (45, 20517), (54, 20577), (61, 20661), (76, 20985), (80, 20991), (85, 21027), (90, 21060), (92, 21075), (106, 21153), (111, 21174), (112, 21180), (114, 21195), (122, 21219), (125, 21234), (129, 21258), (137, 21309),

Gene: Anakin_35 Start: 22628, Stop: 23818, Start Num: 12
Candidate Starts for Anakin_35:

(8, 22529), (Start: 12 @22628 has 34 MA's), (15, 22730), (16, 22736), (45, 22946), (63, 23117), (64, 23132), (68, 23243), (75, 23372), (77, 23429), (79, 23435), (87, 23489), (111, 23630), (114, 23651), (125, 23690),

Gene: AnnaLie_23 Start: 18353, Stop: 19102, Start Num: 46
Candidate Starts for AnnaLie_23:
(13, 18029), (Start: 46 @18353 has 41 MA's), (51, 18389), (52, 18395), (60, 18479), (69, 18647), (71, 18671), (78, 18827), (83, 18860), (84, 18869), (85, 18872), (104, 18986), (106, 18998), (124, 19088), (125, 19097),

Gene: AnnaSerena_35 Start: 22639, Stop: 23853, Start Num: 12
Candidate Starts for AnnaSerena_35:
(8, 22540), (Start: 12 @22639 has 34 MA's), (15, 22741), (16, 22747), (45, 22957), (63, 23128), (64, 23143), (68, 23254), (75, 23383), (77, 23440), (79, 23446), (87, 23500), (111, 23641), (114, 23662), (125, 23701),

Gene: Annapurna_34 Start: 21832, Stop: 22956, Start Num: 12
Candidate Starts for Annapurna_34:
(9, 21751), (Start: 12 @21832 has 34 MA's), (15, 21934), (45, 22135), (63, 22306), (66, 22345), (68, 22432), (76, 22609), (79, 22615), (93, 22711), (103, 22759), (106, 22777), (111, 22798), (121, 22843), (129, 22882),

Gene: Antares_43 Start: 30215, Stop: 31120, Start Num: 42
Candidate Starts for Antares_43:
(Start: 42 @30215 has 56 MA's), (45, 30260), (47, 30278), (52, 30311), (61, 30410), (62, 30425), (63, 30437), (66, 30476), (70, 30572), (72, 30614), (76, 30731), (93, 30833), (97, 30854), (106, 30899), (110, 30917), (112, 30926), (114, 30941), (138, 31067),

Gene: Antuna_29 Start: 18621, Stop: 19514, Start Num: 40
Candidate Starts for Antuna_29:
(35, 18588), (Start: 40 @18621 has 11 MA's), (45, 18669), (58, 18786), (59, 18789), (60, 18804), (68, 18972), (79, 19152), (93, 19251), (99, 19281), (109, 19335), (113, 19356), (136, 19482),

Gene: Appa_28 Start: 18486, Stop: 19379, Start Num: 40
Candidate Starts for Appa_28:
(Start: 40 @18486 has 11 MA's), (45, 18534), (58, 18651), (59, 18654), (60, 18669), (68, 18837), (79, 19017), (93, 19116), (99, 19146), (109, 19200), (113, 19221), (136, 19347),

Gene: Arroyo_23 Start: 18553, Stop: 19302, Start Num: 46
Candidate Starts for Arroyo_23:
(22, 18376), (Start: 46 @18553 has 41 MA's), (51, 18589), (60, 18679), (69, 18847), (71, 18871), (78, 19027), (83, 19060), (84, 19069), (85, 19072), (104, 19186), (106, 19198), (124, 19288), (125, 19297),

Gene: Artiphact_35 Start: 22629, Stop: 23843, Start Num: 12
Candidate Starts for Artiphact_35:
(8, 22530), (Start: 12 @22629 has 34 MA's), (15, 22731), (16, 22737), (45, 22947), (63, 23118), (64, 23133), (68, 23244), (75, 23373), (77, 23430), (79, 23436), (87, 23490), (111, 23631), (114, 23652), (125, 23691),

Gene: Avocadoman_22 Start: 18108, Stop: 18857, Start Num: 46
Candidate Starts for Avocadoman_22:
(3, 17457), (4, 17475), (6, 17640), (Start: 46 @18108 has 41 MA's), (52, 18150), (60, 18234), (69, 18402), (71, 18426), (78, 18582), (83, 18615), (84, 18624), (104, 18741), (106, 18753), (124, 18843),

(125, 18852),

Gene: AylexOG_23 Start: 18374, Stop: 19129, Start Num: 46
Candidate Starts for AylexOG_23:
(1, 16817), (2, 17630), (13, 18050), (44, 18338), (Start: 46 @18374 has 41 MA's), (52, 18416), (57, 18476), (60, 18500), (69, 18668), (71, 18692), (78, 18851), (83, 18884), (84, 18893), (104, 19010), (123, 19112),

Gene: AyoTeo_29 Start: 20601, Stop: 21482, Start Num: 42
Candidate Starts for AyoTeo_29:
(Start: 42 @20601 has 56 MA's), (45, 20646), (54, 20706), (61, 20790), (76, 21114), (80, 21120), (85, 21156), (90, 21189), (92, 21204), (106, 21282), (111, 21303), (112, 21309), (114, 21324), (122, 21348), (125, 21363), (129, 21387), (137, 21438),

Gene: BabyDaisy_23 Start: 18169, Stop: 18918, Start Num: 46
Candidate Starts for BabyDaisy_23:
(Start: 46 @18169 has 41 MA's), (52, 18211), (69, 18463), (71, 18487), (78, 18643), (83, 18676), (84, 18685), (85, 18688), (104, 18802), (106, 18814), (124, 18904), (125, 18913),

Gene: BaronJohn_24 Start: 17331, Stop: 18200, Start Num: 38
Candidate Starts for BaronJohn_24:
(Start: 38 @17331 has 13 MA's), (45, 17376), (53, 17433), (63, 17553), (79, 17847), (93, 17943), (106, 18024), (110, 18042),

Gene: BeagleBug_42 Start: 29996, Stop: 30901, Start Num: 42
Candidate Starts for BeagleBug_42:
(Start: 42 @29996 has 56 MA's), (45, 30041), (47, 30059), (52, 30092), (61, 30191), (63, 30218), (66, 30257), (70, 30353), (72, 30395), (76, 30512), (93, 30614), (97, 30635), (106, 30680), (110, 30698), (112, 30707), (114, 30722), (138, 30848),

Gene: BelmontSKP_23 Start: 18353, Stop: 19102, Start Num: 46
Candidate Starts for BelmontSKP_23:
(13, 18029), (Start: 46 @18353 has 41 MA's), (51, 18389), (52, 18395), (60, 18479), (69, 18647), (71, 18671), (78, 18827), (83, 18860), (84, 18869), (85, 18872), (104, 18986), (106, 18998), (124, 19088), (125, 19097),

Gene: Bengal_22 Start: 17941, Stop: 18690, Start Num: 46
Candidate Starts for Bengal_22:
(Start: 46 @17941 has 41 MA's), (52, 17983), (60, 18067), (69, 18235), (71, 18259), (78, 18415), (83, 18448), (84, 18457), (104, 18574), (106, 18586), (124, 18676), (125, 18685),

Gene: Benry_27 Start: 19174, Stop: 20046, Start Num: 42
Candidate Starts for Benry_27:
(34, 19132), (Start: 42 @19174 has 56 MA's), (45, 19219), (65, 19423), (67, 19474), (74, 19609), (76, 19678), (89, 19759), (94, 19801), (101, 19837), (116, 19924),

Gene: Blett_29 Start: 18633, Stop: 19526, Start Num: 40
Candidate Starts for Blett_29:
(Start: 40 @18633 has 11 MA's), (45, 18681), (58, 18798), (59, 18801), (60, 18816), (61, 18831), (68, 18984), (79, 19164), (93, 19263), (99, 19293), (109, 19347), (113, 19368), (136, 19494),

Gene: BrazzalePHS_42 Start: 30010, Stop: 30915, Start Num: 42
Candidate Starts for BrazzalePHS_42:

(Start: 42 @30010 has 56 MA's), (45, 30055), (47, 30073), (52, 30106), (61, 30205), (62, 30220), (63, 30232), (66, 30271), (70, 30367), (72, 30409), (76, 30526), (93, 30628), (97, 30649), (106, 30694), (110, 30712), (112, 30721), (114, 30736), (138, 30862),

Gene: BubbaBear_22 Start: 18037, Stop: 18792, Start Num: 46
Candidate Starts for BubbaBear_22:
(44, 18001), (Start: 46 @18037 has 41 MA's), (52, 18079), (60, 18163), (69, 18331), (71, 18355), (78, 18514), (83, 18547), (84, 18556), (104, 18673), (123, 18775),

Gene: Burritobowl_22 Start: 18109, Stop: 18858, Start Num: 46
Candidate Starts for Burritobowl_22:
(Start: 46 @18109 has 41 MA's), (51, 18145), (52, 18151), (60, 18235), (69, 18403), (71, 18427), (78, 18583), (83, 18616), (84, 18625), (85, 18628), (104, 18742), (106, 18754), (124, 18844), (125, 18853),

Gene: Busephilis_42 Start: 29951, Stop: 30856, Start Num: 42
Candidate Starts for Busephilis_42:
(Start: 42 @29951 has 56 MA's), (45, 29996), (47, 30014), (52, 30047), (61, 30146), (63, 30173), (66, 30212), (70, 30308), (72, 30350), (76, 30467), (93, 30569), (97, 30590), (106, 30635), (110, 30653), (112, 30662), (114, 30677), (138, 30803),

Gene: Bush_29 Start: 18611, Stop: 19504, Start Num: 40
Candidate Starts for Bush_29:
(35, 18578), (Start: 40 @18611 has 11 MA's), (45, 18659), (58, 18776), (59, 18779), (60, 18794), (68, 18962), (79, 19142), (93, 19241), (99, 19271), (109, 19325), (113, 19346), (136, 19472),

Gene: CaptainRex_23 Start: 16759, Stop: 17634, Start Num: 38
Candidate Starts for CaptainRex_23:
(Start: 38 @16759 has 13 MA's), (45, 16804), (50, 16846), (52, 16855), (53, 16861), (63, 16981), (65, 17014), (79, 17275), (93, 17371), (106, 17452),

Gene: Carrillo_30 Start: 18590, Stop: 19483, Start Num: 40
Candidate Starts for Carrillo_30:
(35, 18557), (Start: 40 @18590 has 11 MA's), (45, 18638), (58, 18755), (59, 18758), (60, 18773), (68, 18941), (79, 19121), (93, 19220), (99, 19250), (109, 19304), (113, 19325), (136, 19451),

Gene: Cashington_22 Start: 17958, Stop: 18707, Start Num: 46
Candidate Starts for Cashington_22:
(13, 17634), (23, 17784), (Start: 46 @17958 has 41 MA's), (52, 18000), (60, 18084), (69, 18252), (71, 18276), (78, 18432), (83, 18465), (84, 18474), (104, 18591), (106, 18603), (124, 18693), (125, 18702),

Gene: Chivey_34 Start: 21781, Stop: 22905, Start Num: 12
Candidate Starts for Chivey_34:
(9, 21700), (Start: 12 @21781 has 34 MA's), (15, 21883), (45, 22084), (63, 22255), (66, 22294), (68, 22381), (76, 22558), (79, 22564), (93, 22660), (103, 22708), (106, 22726), (111, 22747), (121, 22792), (129, 22831),

Gene: Cicada_29 Start: 20694, Stop: 21569, Start Num: 42
Candidate Starts for Cicada_29:
(Start: 42 @20694 has 56 MA's), (45, 20739), (76, 21204), (85, 21246), (90, 21279), (93, 21306), (106, 21372), (111, 21393), (114, 21414), (129, 21477),

Gene: ClearAsMud_45 Start: 30109, Stop: 30996, Start Num: 42
Candidate Starts for ClearAsMud_45:

(25, 30037), (Start: 42 @30109 has 56 MA's), (45, 30154), (47, 30172), (52, 30205), (62, 30319), (66, 30370), (70, 30466), (72, 30508), (76, 30619), (80, 30625), (81, 30634), (93, 30721), (97, 30742), (106, 30787), (110, 30805), (112, 30814),

Gene: CookieDog_29 Start: 18608, Stop: 19501, Start Num: 40
Candidate Starts for CookieDog_29:
(39, 18602), (Start: 40 @18608 has 11 MA's), (45, 18656), (58, 18773), (59, 18776), (60, 18791), (68, 18959), (79, 19139), (93, 19238), (99, 19268), (109, 19322), (113, 19343), (136, 19469),

Gene: CoolCookie_35 Start: 22635, Stop: 23849, Start Num: 12
Candidate Starts for CoolCookie_35:
(Start: 12 @22635 has 34 MA's), (15, 22737), (16, 22743), (45, 22953), (63, 23124), (64, 23139), (68, 23250), (75, 23379), (77, 23436), (79, 23442), (87, 23496), (111, 23637), (114, 23658), (125, 23697),

Gene: Cranjis_44 Start: 30170, Stop: 31075, Start Num: 42
Candidate Starts for Cranjis_44:
(Start: 42 @30170 has 56 MA's), (45, 30215), (47, 30233), (52, 30266), (61, 30365), (63, 30392), (66, 30431), (70, 30527), (72, 30569), (76, 30686), (93, 30788), (97, 30809), (106, 30854), (110, 30872), (112, 30881), (114, 30896), (138, 31022),

Gene: CrazyRich_42 Start: 29979, Stop: 30884, Start Num: 42
Candidate Starts for CrazyRich_42:
(Start: 42 @29979 has 56 MA's), (45, 30024), (47, 30042), (52, 30075), (61, 30174), (63, 30201), (66, 30240), (70, 30336), (72, 30378), (76, 30495), (93, 30597), (97, 30618), (106, 30663), (110, 30681), (112, 30690), (114, 30705), (138, 30831),

Gene: Crestdrop_34 Start: 21695, Stop: 22819, Start Num: 12
Candidate Starts for Crestdrop_34:
(9, 21614), (Start: 12 @21695 has 34 MA's), (15, 21797), (45, 21998), (63, 22169), (66, 22208), (68, 22295), (76, 22472), (79, 22478), (93, 22574), (103, 22622), (106, 22640), (111, 22661), (121, 22706), (129, 22745),

Gene: Crisis_44 Start: 29970, Stop: 30875, Start Num: 42
Candidate Starts for Crisis_44:
(Start: 42 @29970 has 56 MA's), (45, 30015), (47, 30033), (52, 30066), (61, 30165), (63, 30192), (66, 30231), (70, 30327), (72, 30369), (76, 30486), (93, 30588), (97, 30609), (106, 30654), (110, 30672), (112, 30681), (114, 30696), (138, 30822),

Gene: CroZenni_22 Start: 17944, Stop: 18696, Start Num: 46
Candidate Starts for CroZenni_22:
(13, 17620), (44, 17908), (Start: 46 @17944 has 41 MA's), (52, 17986), (60, 18070), (69, 18238), (71, 18262), (78, 18421), (83, 18454), (84, 18463), (104, 18580), (106, 18592), (124, 18682), (125, 18691),

Gene: CupcakePrincess_22 Start: 18064, Stop: 18816, Start Num: 46
Candidate Starts for CupcakePrincess_22:
(44, 18028), (Start: 46 @18064 has 41 MA's), (52, 18106), (69, 18358), (71, 18382), (78, 18541), (83, 18574), (85, 18586), (119, 18781), (123, 18799),

Gene: Cybele_35 Start: 22605, Stop: 23819, Start Num: 12
Candidate Starts for Cybele_35:
(8, 22506), (Start: 12 @22605 has 34 MA's), (15, 22707), (16, 22713), (45, 22923), (63, 23094), (64, 23109), (68, 23220), (75, 23349), (77, 23406), (79, 23412), (87, 23466), (111, 23607), (114, 23628), (125, 23667),

Gene: DannyDe_34 Start: 21778, Stop: 22911, Start Num: 12
Candidate Starts for DannyDe_34:
(9, 21697), (Start: 12 @21778 has 34 MA's), (15, 21880), (45, 22081), (63, 22252), (66, 22291), (68, 22378), (76, 22555), (79, 22561), (93, 22657), (103, 22705), (106, 22723), (111, 22744), (121, 22789), (129, 22828),

Gene: Dauntless_34 Start: 22338, Stop: 23462, Start Num: 12
Candidate Starts for Dauntless_34:
(7, 22227), (Start: 12 @22338 has 34 MA's), (15, 22440), (16, 22446), (18, 22452), (45, 22641), (63, 22812), (66, 22851), (68, 22938), (76, 23115), (79, 23121), (93, 23217), (103, 23265), (106, 23283), (111, 23304), (121, 23349), (129, 23388),

Gene: DelaGarza_28 Start: 19055, Stop: 19942, Start Num: 42
Candidate Starts for DelaGarza_28:
(21, 18953), (27, 18995), (41, 19052), (Start: 42 @19055 has 56 MA's), (45, 19100), (52, 19151), (55, 19163), (66, 19316), (67, 19361), (69, 19403), (72, 19454), (73, 19457), (79, 19577), (86, 19619), (90, 19646), (93, 19673), (106, 19739), (110, 19757), (111, 19760), (114, 19781), (122, 19817), (138, 19907),

Gene: DickRichards_22 Start: 18439, Stop: 19188, Start Num: 46
Candidate Starts for DickRichards_22:
(Start: 46 @18439 has 41 MA's), (51, 18475), (52, 18481), (60, 18565), (69, 18733), (71, 18757), (78, 18913), (83, 18946), (84, 18955), (85, 18958), (104, 19072), (106, 19084), (124, 19174), (125, 19183),

Gene: Didgeridoo_23 Start: 18171, Stop: 18920, Start Num: 46
Candidate Starts for Didgeridoo_23:
(Start: 46 @18171 has 41 MA's), (52, 18213), (60, 18297), (69, 18465), (71, 18489), (78, 18645), (83, 18678), (84, 18687), (85, 18690), (104, 18804), (106, 18816), (124, 18906), (125, 18915),

Gene: Doobus_22 Start: 18275, Stop: 19024, Start Num: 46
Candidate Starts for Doobus_22:
(13, 17951), (23, 18101), (Start: 46 @18275 has 41 MA's), (52, 18317), (60, 18401), (69, 18569), (71, 18593), (78, 18749), (83, 18782), (84, 18791), (104, 18908), (106, 18920), (124, 19010), (125, 19019),

Gene: Dropshot_28 Start: 18483, Stop: 19376, Start Num: 40
Candidate Starts for Dropshot_28:
(35, 18450), (Start: 40 @18483 has 11 MA's), (45, 18531), (58, 18648), (59, 18651), (60, 18666), (68, 18834), (79, 19014), (93, 19113), (99, 19143), (109, 19197), (113, 19218), (136, 19344),

Gene: EarickHC_43 Start: 29893, Stop: 30798, Start Num: 42
Candidate Starts for EarickHC_43:
(Start: 42 @29893 has 56 MA's), (45, 29938), (47, 29956), (52, 29989), (61, 30088), (63, 30115), (66, 30154), (70, 30250), (72, 30292), (76, 30409), (93, 30511), (97, 30532), (106, 30577), (110, 30595), (112, 30604), (114, 30619), (138, 30745),

Gene: Erudite_34 Start: 22338, Stop: 23462, Start Num: 12
Candidate Starts for Erudite_34:
(7, 22227), (Start: 12 @22338 has 34 MA's), (15, 22440), (16, 22446), (18, 22452), (45, 22641), (63, 22812), (66, 22851), (68, 22938), (76, 23115), (79, 23121), (93, 23217), (103, 23265), (106, 23283), (111, 23304), (121, 23349), (129, 23388),

Gene: Eula_22 Start: 18025, Stop: 18777, Start Num: 46

Candidate Starts for Eula_22:
(44, 17989), (Start: 46 @18025 has 41 MA's), (52, 18067), (69, 18319), (71, 18343), (78, 18502), (83, 18535), (85, 18547), (119, 18742), (123, 18760),

Gene: Finalfrontier_23 Start: 18538, Stop: 19284, Start Num: 46
Candidate Starts for Finalfrontier_23:
(Start: 46 @18538 has 41 MA's), (52, 18580), (69, 18832), (71, 18856), (75, 18955), (78, 19012), (83, 19045), (84, 19054), (85, 19057), (106, 19183), (117, 19246),

Gene: FireCastle_27 Start: 20765, Stop: 21634, Start Num: 42
Candidate Starts for FireCastle_27:
(24, 20663), (26, 20684), (30, 20696), (34, 20723), (Start: 42 @20765 has 56 MA's), (45, 20810), (49, 20843), (65, 21014), (67, 21065), (74, 21200), (76, 21269), (88, 21335), (94, 21392), (96, 21401), (110, 21482), (116, 21515), (127, 21557),

Gene: FountainFog_34 Start: 21919, Stop: 23121, Start Num: 11
Candidate Starts for FountainFog_34:
(11, 21919), (Start: 12 @21940 has 34 MA's), (15, 22042), (16, 22048), (28, 22123), (36, 22168), (45, 22246), (64, 22432), (68, 22543), (77, 22729), (79, 22735), (87, 22789), (114, 22951), (125, 22990),

Gene: FreddieHg_34 Start: 21797, Stop: 22921, Start Num: 12
Candidate Starts for FreddieHg_34:
(9, 21716), (Start: 12 @21797 has 34 MA's), (15, 21899), (45, 22100), (63, 22271), (66, 22310), (68, 22397), (76, 22574), (79, 22580), (93, 22676), (103, 22724), (106, 22742), (111, 22763), (121, 22808), (129, 22847),

Gene: Fulton_23 Start: 16741, Stop: 17616, Start Num: 38
Candidate Starts for Fulton_23:
(Start: 38 @16741 has 13 MA's), (45, 16786), (50, 16828), (52, 16837), (53, 16843), (63, 16963), (65, 16996), (79, 17257), (93, 17353), (106, 17434),

Gene: FuzzBuster_49 Start: 30502, Stop: 31455, Start Num: 42
Candidate Starts for FuzzBuster_49:
(Start: 42 @30502 has 56 MA's), (45, 30547), (48, 30577), (67, 30808), (72, 30901), (74, 30946), (79, 31021), (82, 31036), (91, 31096), (112, 31219), (115, 31240), (135, 31354),

Gene: Ganandorf_42 Start: 30032, Stop: 30937, Start Num: 42
Candidate Starts for Ganandorf_42:
(Start: 42 @30032 has 56 MA's), (45, 30077), (47, 30095), (52, 30128), (61, 30227), (63, 30254), (66, 30293), (70, 30389), (72, 30431), (76, 30548), (93, 30650), (97, 30671), (106, 30716), (110, 30734), (112, 30743), (114, 30758), (138, 30884),

Gene: Gilda_35 Start: 22629, Stop: 23843, Start Num: 12
Candidate Starts for Gilda_35:
(8, 22530), (Start: 12 @22629 has 34 MA's), (15, 22731), (16, 22737), (45, 22947), (63, 23118), (66, 23157), (68, 23244), (75, 23373), (77, 23430), (79, 23436), (87, 23490), (111, 23631), (114, 23652), (125, 23691),

Gene: Gingerbug_26 Start: 19185, Stop: 20060, Start Num: 42
Candidate Starts for Gingerbug_26:
(Start: 42 @19185 has 56 MA's), (45, 19230), (52, 19281), (55, 19293), (67, 19491), (69, 19533), (72, 19584), (73, 19587), (76, 19701), (85, 19743), (90, 19776), (93, 19803), (106, 19869), (111, 19890), (134, 20016),

Gene: Glorp_44 Start: 30033, Stop: 30938, Start Num: 42
Candidate Starts for Glorp_44:
(Start: 42 @30033 has 56 MA's), (45, 30078), (47, 30096), (52, 30129), (61, 30228), (63, 30255), (66, 30294), (68, 30372), (72, 30432), (76, 30549), (81, 30564), (93, 30651), (97, 30672), (99, 30681), (106, 30717), (112, 30744), (114, 30759), (130, 30828), (138, 30885),

Gene: Goodman_28 Start: 20607, Stop: 21482, Start Num: 42
Candidate Starts for Goodman_28:
(Start: 42 @20607 has 56 MA's), (43, 20619), (45, 20652), (76, 21117), (85, 21159), (90, 21192), (93, 21219), (106, 21285), (111, 21306), (114, 21327), (129, 21390),

Gene: GreenIvy_23 Start: 17333, Stop: 18202, Start Num: 38
Candidate Starts for GreenIvy_23:
(Start: 38 @17333 has 13 MA's), (45, 17378), (53, 17435), (63, 17555), (79, 17849), (93, 17945), (106, 18026), (110, 18044),

Gene: Guzman_30 Start: 18892, Stop: 19785, Start Num: 40
Candidate Starts for Guzman_30:
(Start: 40 @18892 has 11 MA's), (45, 18940), (58, 19057), (59, 19060), (60, 19075), (68, 19243), (79, 19423), (93, 19522), (99, 19552), (109, 19606), (113, 19627), (136, 19753),

Gene: Hager_36 Start: 22192, Stop: 23385, Start Num: 12
Candidate Starts for Hager_36:
(10, 22147), (Start: 12 @22192 has 34 MA's), (15, 22294), (16, 22300), (45, 22510), (64, 22696), (68, 22807), (77, 22993), (79, 22999), (87, 23053), (111, 23194), (114, 23215), (125, 23254), (133, 23329),

Gene: Hasitha_23 Start: 16759, Stop: 17628, Start Num: 38
Candidate Starts for Hasitha_23:
(Start: 38 @16759 has 13 MA's), (45, 16804), (53, 16861), (63, 16981), (65, 17014), (79, 17275), (93, 17371), (106, 17452), (110, 17470),

Gene: Haunter_35 Start: 22042, Stop: 23235, Start Num: 12
Candidate Starts for Haunter_35:
(8, 21943), (Start: 12 @22042 has 34 MA's), (15, 22144), (16, 22150), (45, 22360), (63, 22531), (64, 22546), (68, 22657), (75, 22786), (77, 22843), (79, 22849), (87, 22903), (111, 23044), (114, 23065), (125, 23104),

Gene: HerculesXL_23 Start: 16850, Stop: 17716, Start Num: 38
Candidate Starts for HerculesXL_23:
(Start: 38 @16850 has 13 MA's), (45, 16904), (52, 16955), (54, 16964), (60, 17039), (63, 17081), (65, 17114), (75, 17324), (79, 17375), (85, 17411), (90, 17444), (93, 17471), (114, 17591),

Gene: Hermeonysus_42 Start: 29899, Stop: 30804, Start Num: 42
Candidate Starts for Hermeonysus_42:
(Start: 42 @29899 has 56 MA's), (45, 29944), (47, 29962), (52, 29995), (61, 30094), (63, 30121), (66, 30160), (70, 30256), (72, 30298), (76, 30415), (93, 30517), (97, 30538), (106, 30583), (110, 30601), (112, 30610), (114, 30625),

Gene: Hiddenleaf_34 Start: 21781, Stop: 22905, Start Num: 12
Candidate Starts for Hiddenleaf_34:
(9, 21700), (Start: 12 @21781 has 34 MA's), (15, 21883), (45, 22084), (63, 22255), (66, 22294), (68, 22381), (76, 22558), (79, 22564), (93, 22660), (103, 22708), (106, 22726), (111, 22747), (121, 22792),

(129, 22831),

Gene: Honeyfin_44 Start: 30220, Stop: 31125, Start Num: 42
Candidate Starts for Honeyfin_44:
(33, 30193), (Start: 42 @30220 has 56 MA's), (45, 30265), (47, 30283), (52, 30316), (61, 30415), (63, 30442), (66, 30481), (68, 30559), (72, 30619), (76, 30736), (81, 30751), (93, 30838), (97, 30859), (99, 30868), (106, 30904), (110, 30922), (112, 30931), (114, 30946), (130, 31015), (138, 31072),

Gene: Htur_27 Start: 20662, Stop: 21537, Start Num: 42
Candidate Starts for Htur_27:
(Start: 42 @20662 has 56 MA's), (45, 20707), (54, 20767), (79, 21178), (85, 21214), (93, 21274), (110, 21373),

Gene: IndiRoo_27 Start: 19199, Stop: 20071, Start Num: 42
Candidate Starts for IndiRoo_27:
(26, 19103), (34, 19142), (Start: 42 @19199 has 56 MA's), (43, 19211), (45, 19244), (52, 19295), (56, 19340), (61, 19388), (67, 19499), (69, 19538), (74, 19634), (76, 19703), (88, 19769), (94, 19826), (101, 19862), (116, 19949),

Gene: IndyLu_22 Start: 17993, Stop: 18739, Start Num: 46
Candidate Starts for IndyLu_22:
(Start: 46 @17993 has 41 MA's), (52, 18035), (69, 18287), (71, 18311), (75, 18410), (78, 18467), (83, 18500), (84, 18509), (85, 18512), (106, 18638), (117, 18701),

Gene: JDawG_34 Start: 22365, Stop: 23489, Start Num: 12
Candidate Starts for JDawG_34:
(8, 22266), (9, 22284), (Start: 12 @22365 has 34 MA's), (15, 22467), (45, 22668), (63, 22839), (66, 22878), (68, 22965), (76, 23142), (79, 23148), (93, 23244), (103, 23292), (106, 23310), (111, 23331), (121, 23376), (129, 23415),

Gene: Jabb_22 Start: 18064, Stop: 18816, Start Num: 46
Candidate Starts for Jabb_22:
(44, 18028), (Start: 46 @18064 has 41 MA's), (52, 18106), (69, 18358), (71, 18382), (78, 18541), (83, 18574), (85, 18586), (119, 18781), (123, 18799),

Gene: Jakelyne_31 Start: 18699, Stop: 19592, Start Num: 40
Candidate Starts for Jakelyne_31:
(Start: 40 @18699 has 11 MA's), (45, 18747), (58, 18864), (59, 18867), (60, 18882), (68, 19050), (79, 19230), (93, 19329), (99, 19359), (109, 19413), (113, 19434), (136, 19560),

Gene: Jefe_43 Start: 29957, Stop: 30862, Start Num: 42
Candidate Starts for Jefe_43:
(Start: 42 @29957 has 56 MA's), (45, 30002), (47, 30020), (52, 30053), (61, 30152), (63, 30179), (66, 30218), (68, 30296), (72, 30356), (76, 30473), (81, 30488), (93, 30575), (97, 30596), (99, 30605), (106, 30641), (110, 30659), (112, 30668), (114, 30683), (130, 30752), (138, 30809),

Gene: Jera_28 Start: 19719, Stop: 20600, Start Num: 42
Candidate Starts for Jera_28:
(Start: 42 @19719 has 56 MA's), (45, 19764), (54, 19824), (61, 19908), (76, 20232), (80, 20238), (85, 20274), (90, 20307), (92, 20322), (106, 20400), (111, 20421), (112, 20427), (114, 20442), (125, 20481), (129, 20505), (137, 20556),

Gene: JingleBells_34 Start: 21902, Stop: 23026, Start Num: 12

Candidate Starts for JingleBells_34:
(7, 21791), (Start: 12 @21902 has 34 MA's), (15, 22004), (16, 22010), (18, 22016), (45, 22205), (63, 22376), (64, 22391), (68, 22502), (76, 22679), (79, 22685), (93, 22781), (103, 22829), (106, 22847), (111, 22868), (121, 22913), (129, 22952),

Gene: Johann_28 Start: 20607, Stop: 21482, Start Num: 42
Candidate Starts for Johann_28:
(Start: 42 @20607 has 56 MA's), (43, 20619), (45, 20652), (76, 21117), (85, 21159), (90, 21192), (93, 21219), (106, 21285), (111, 21306), (114, 21327), (129, 21390),

Gene: Johnathan_22 Start: 18048, Stop: 18797, Start Num: 46
Candidate Starts for Johnathan_22:
(13, 17724), (23, 17874), (Start: 46 @18048 has 41 MA's), (52, 18090), (60, 18174), (69, 18342), (71, 18366), (78, 18522), (83, 18555), (84, 18564), (104, 18681), (106, 18693), (124, 18783), (125, 18792),

Gene: Jollipop_43 Start: 30296, Stop: 31201, Start Num: 42
Candidate Starts for Jollipop_43:
(Start: 42 @30296 has 56 MA's), (45, 30341), (47, 30359), (52, 30392), (61, 30491), (63, 30518), (66, 30557), (70, 30653), (72, 30695), (76, 30812), (93, 30914), (97, 30935), (106, 30980), (110, 30998), (112, 31007), (114, 31022), (138, 31148),

Gene: Jovita_22 Start: 18129, Stop: 18881, Start Num: 46
Candidate Starts for Jovita_22:
(44, 18093), (Start: 46 @18129 has 41 MA's), (52, 18171), (69, 18423), (71, 18447), (78, 18606), (83, 18639), (85, 18651), (119, 18846), (123, 18864),

Gene: KaiHaiDragon_43 Start: 29893, Stop: 30798, Start Num: 42
Candidate Starts for KaiHaiDragon_43:
(Start: 42 @29893 has 56 MA's), (45, 29938), (47, 29956), (52, 29989), (61, 30088), (63, 30115), (66, 30154), (70, 30250), (72, 30292), (76, 30409), (93, 30511), (97, 30532), (106, 30577), (110, 30595), (112, 30604), (114, 30619), (138, 30745),

Gene: Karate_34 Start: 22660, Stop: 23841, Start Num: 12
Candidate Starts for Karate_34:
(11, 22639), (Start: 12 @22660 has 34 MA's), (15, 22762), (16, 22768), (28, 22843), (36, 22888), (45, 22966), (64, 23152), (68, 23263), (77, 23449), (79, 23455), (87, 23509), (114, 23671), (125, 23710), (126, 23731),

Gene: Kate_35 Start: 22637, Stop: 23851, Start Num: 12
Candidate Starts for Kate_35:
(8, 22538), (Start: 12 @22637 has 34 MA's), (15, 22739), (16, 22745), (45, 22955), (63, 23126), (64, 23141), (68, 23252), (75, 23381), (77, 23438), (79, 23444), (87, 23498), (111, 23639), (114, 23660), (125, 23699),

Gene: Kate33_22 Start: 17995, Stop: 18741, Start Num: 46
Candidate Starts for Kate33_22:
(Start: 46 @17995 has 41 MA's), (52, 18037), (69, 18289), (71, 18313), (75, 18412), (78, 18469), (83, 18502), (84, 18511), (85, 18514), (106, 18640), (117, 18703),

Gene: Kavo_22 Start: 16689, Stop: 17552, Start Num: 38
Candidate Starts for Kavo_22:
(Start: 38 @16689 has 13 MA's), (45, 16743), (52, 16794), (54, 16803), (60, 16878), (63, 16920), (65, 16953), (79, 17214), (85, 17250), (90, 17283), (93, 17310), (114, 17430),

Gene: Kenzers_22 Start: 18012, Stop: 18767, Start Num: 46
Candidate Starts for Kenzers_22:
(13, 17688), (32, 17898), (44, 17976), (Start: 46 @18012 has 41 MA's), (52, 18054), (60, 18138), (69, 18306), (71, 18330), (78, 18489), (83, 18522), (84, 18531), (104, 18648), (117, 18723), (123, 18750),

Gene: Kowalski_42 Start: 30006, Stop: 30911, Start Num: 42
Candidate Starts for Kowalski_42:
(Start: 42 @30006 has 56 MA's), (45, 30051), (47, 30069), (52, 30102), (61, 30201), (63, 30228), (66, 30267), (70, 30363), (72, 30405), (76, 30522), (93, 30624), (97, 30645), (106, 30690), (110, 30708), (112, 30717), (114, 30732), (138, 30858),

Gene: Krampus_35 Start: 22637, Stop: 23851, Start Num: 12
Candidate Starts for Krampus_35:
(8, 22538), (Start: 12 @22637 has 34 MA's), (15, 22739), (16, 22745), (45, 22955), (63, 23126), (64, 23141), (68, 23252), (75, 23381), (77, 23438), (79, 23444), (87, 23498), (111, 23639), (114, 23660), (125, 23699),

Gene: Labella_29 Start: 20600, Stop: 21481, Start Num: 42
Candidate Starts for Labella_29:
(29, 20534), (Start: 42 @20600 has 56 MA's), (45, 20645), (54, 20705), (61, 20789), (76, 21113), (80, 21119), (85, 21155), (90, 21188), (92, 21203), (106, 21281), (111, 21302), (112, 21308), (114, 21323), (122, 21347), (125, 21362), (129, 21386), (137, 21437),

Gene: Lahqtemish_22 Start: 18041, Stop: 18790, Start Num: 46
Candidate Starts for Lahqtemish_22:
(Start: 46 @18041 has 41 MA's), (52, 18083), (60, 18167), (69, 18335), (71, 18359), (78, 18515), (83, 18548), (84, 18557), (85, 18560), (104, 18674), (106, 18686), (124, 18776), (125, 18785),

Gene: Lesiram_29 Start: 19024, Stop: 19914, Start Num: 42
Candidate Starts for Lesiram_29:
(21, 18922), (27, 18964), (41, 19021), (Start: 42 @19024 has 56 MA's), (45, 19069), (52, 19120), (55, 19132), (66, 19285), (67, 19330), (69, 19372), (72, 19423), (73, 19426), (79, 19546), (86, 19588), (90, 19615), (93, 19642), (106, 19708), (110, 19726), (111, 19729), (114, 19750), (138, 19876),

Gene: Librie_23 Start: 16759, Stop: 17634, Start Num: 38
Candidate Starts for Librie_23:
(Start: 38 @16759 has 13 MA's), (45, 16804), (50, 16846), (52, 16855), (53, 16861), (63, 16981), (65, 17014), (79, 17275), (93, 17371), (106, 17452),

Gene: LilTerminator_23 Start: 16765, Stop: 17634, Start Num: 38
Candidate Starts for LilTerminator_23:
(Start: 38 @16765 has 13 MA's), (45, 16810), (53, 16867), (63, 16987), (65, 17020), (79, 17281), (93, 17377), (106, 17458), (110, 17476),

Gene: Lilo27_22 Start: 18001, Stop: 18753, Start Num: 46
Candidate Starts for Lilo27_22:
(13, 17677), (44, 17965), (Start: 46 @18001 has 41 MA's), (52, 18043), (69, 18295), (71, 18319), (78, 18478), (83, 18511), (85, 18523), (123, 18736),

Gene: LimaBean_22 Start: 18044, Stop: 18793, Start Num: 46
Candidate Starts for LimaBean_22:

(13, 17720), (23, 17870), (44, 18008), (Start: 46 @18044 has 41 MA's), (52, 18086), (60, 18170), (69, 18338), (71, 18362), (78, 18518), (83, 18551), (84, 18560), (104, 18677), (106, 18689), (124, 18779), (125, 18788),

Gene: Linayshia_27 Start: 20654, Stop: 21529, Start Num: 42
Candidate Starts for Linayshia_27:
(Start: 42 @20654 has 56 MA's), (45, 20699), (54, 20759), (79, 21170), (85, 21206), (93, 21266), (110, 21365),

Gene: LittleFortune_44 Start: 30262, Stop: 31167, Start Num: 42
Candidate Starts for LittleFortune_44:
(Start: 42 @30262 has 56 MA's), (45, 30307), (47, 30325), (52, 30358), (61, 30457), (63, 30484), (66, 30523), (70, 30619), (72, 30661), (76, 30778), (93, 30880), (97, 30901), (106, 30946), (110, 30964), (112, 30973), (114, 30988), (138, 31114),

Gene: Losacky_30 Start: 18763, Stop: 19656, Start Num: 40
Candidate Starts for Losacky_30:
(Start: 40 @18763 has 11 MA's), (45, 18811), (58, 18928), (59, 18931), (60, 18946), (68, 19114), (79, 19294), (93, 19393), (99, 19423), (109, 19477), (113, 19498), (136, 19624),

Gene: Lucretia_43 Start: 29949, Stop: 30854, Start Num: 42
Candidate Starts for Lucretia_43:
(Start: 42 @29949 has 56 MA's), (45, 29994), (47, 30012), (52, 30045), (61, 30144), (63, 30171), (66, 30210), (70, 30306), (72, 30348), (76, 30465), (93, 30567), (97, 30588), (106, 30633), (110, 30651), (112, 30660), (114, 30675), (138, 30801),

Gene: Lynlen_22 Start: 18012, Stop: 18767, Start Num: 46
Candidate Starts for Lynlen_22:
(13, 17688), (32, 17898), (44, 17976), (Start: 46 @18012 has 41 MA's), (52, 18054), (60, 18138), (69, 18306), (71, 18330), (78, 18489), (83, 18522), (84, 18531), (104, 18648), (117, 18723), (123, 18750),

Gene: Mariel_32 Start: 19055, Stop: 19933, Start Num: 40
Candidate Starts for Mariel_32:
(Start: 40 @19055 has 11 MA's), (45, 19103), (58, 19220), (59, 19223), (60, 19238), (68, 19406), (79, 19586), (81, 19598), (85, 19622), (93, 19682), (104, 19739), (132, 19886),

Gene: MenE_29 Start: 18751, Stop: 19644, Start Num: 40
Candidate Starts for MenE_29:
(35, 18718), (Start: 40 @18751 has 11 MA's), (45, 18799), (58, 18916), (59, 18919), (60, 18934), (68, 19102), (79, 19282), (93, 19381), (99, 19411), (109, 19465), (113, 19486), (136, 19612),

Gene: Milani_28 Start: 19814, Stop: 20680, Start Num: 42
Candidate Starts for Milani_28:
(26, 19733), (34, 19772), (Start: 42 @19814 has 56 MA's), (45, 19859), (61, 20003), (65, 20063), (67, 20114), (74, 20249), (76, 20315), (94, 20435), (95, 20441), (100, 20465), (101, 20471), (116, 20558), (118, 20564),

Gene: Milomuff_23 Start: 18408, Stop: 19157, Start Num: 46
Candidate Starts for Milomuff_23:
(Start: 46 @18408 has 41 MA's), (51, 18444), (52, 18450), (60, 18534), (69, 18702), (71, 18726), (78, 18882), (83, 18915), (84, 18924), (104, 19041), (106, 19053), (124, 19143), (125, 19152),

Gene: MortySmith_33 Start: 21753, Stop: 22877, Start Num: 12

Candidate Starts for MortySmith_33:
(Start: 12 @21753 has 34 MA's), (15, 21855), (45, 22056), (63, 22227), (66, 22266), (68, 22353), (76, 22530), (79, 22536), (93, 22632), (103, 22680), (106, 22698), (111, 22719), (121, 22764), (129, 22803),

Gene: MsUbiquitous_22 Start: 18064, Stop: 18816, Start Num: 46
Candidate Starts for MsUbiquitous_22:
(44, 18028), (Start: 46 @18064 has 41 MA's), (52, 18106), (69, 18358), (71, 18382), (78, 18541), (83, 18574), (85, 18586), (119, 18781), (123, 18799),

Gene: NCRodriguez_30 Start: 18800, Stop: 19693, Start Num: 40
Candidate Starts for NCRodriguez_30:
(Start: 40 @18800 has 11 MA's), (45, 18848), (58, 18965), (59, 18968), (60, 18983), (68, 19151), (79, 19331), (93, 19430), (99, 19460), (109, 19514), (113, 19535), (136, 19661),

Gene: NarutoRun_35 Start: 22628, Stop: 23818, Start Num: 12
Candidate Starts for NarutoRun_35:
(8, 22529), (Start: 12 @22628 has 34 MA's), (15, 22730), (16, 22736), (45, 22946), (63, 23117), (64, 23132), (68, 23243), (75, 23372), (77, 23429), (79, 23435), (87, 23489), (111, 23630), (114, 23651), (125, 23690),

Gene: Neptune_35 Start: 22605, Stop: 23819, Start Num: 12
Candidate Starts for Neptune_35:
(8, 22506), (Start: 12 @22605 has 34 MA's), (15, 22707), (16, 22713), (45, 22923), (63, 23094), (64, 23109), (68, 23220), (75, 23349), (77, 23406), (79, 23412), (87, 23466), (111, 23607), (114, 23628), (125, 23667),

Gene: Nicky22_23 Start: 18472, Stop: 19227, Start Num: 46
Candidate Starts for Nicky22_23:
(13, 18148), (44, 18436), (Start: 46 @18472 has 41 MA's), (52, 18514), (69, 18766), (71, 18790), (78, 18949), (80, 18955), (83, 18982), (84, 18991), (85, 18994), (123, 19210),

Gene: NoodlelyBoi_43 Start: 30319, Stop: 31206, Start Num: 42
Candidate Starts for NoodlelyBoi_43:
(Start: 42 @30319 has 56 MA's), (45, 30364), (47, 30382), (52, 30415), (62, 30529), (65, 30574), (66, 30580), (70, 30676), (72, 30718), (76, 30829), (93, 30931), (97, 30952), (99, 30961), (106, 30997), (110, 31015), (112, 31024), (114, 31039),

Gene: OhDear_35 Start: 22634, Stop: 23818, Start Num: 12
Candidate Starts for OhDear_35:
(8, 22535), (Start: 12 @22634 has 34 MA's), (15, 22736), (16, 22742), (45, 22946), (63, 23117), (64, 23132), (68, 23243), (77, 23429), (79, 23435), (87, 23489), (114, 23651), (121, 23675), (125, 23690),

Gene: Olympi_29 Start: 20594, Stop: 21469, Start Num: 42
Candidate Starts for Olympi_29:
(Start: 42 @20594 has 56 MA's), (43, 20606), (45, 20639), (76, 21104), (85, 21146), (90, 21179), (93, 21206), (106, 21272), (111, 21293), (114, 21314), (129, 21377),

Gene: Onika_42 Start: 29981, Stop: 30886, Start Num: 42
Candidate Starts for Onika_42:
(Start: 42 @29981 has 56 MA's), (45, 30026), (47, 30044), (52, 30077), (61, 30176), (62, 30191), (63, 30203), (70, 30338), (72, 30380), (76, 30497), (93, 30599), (97, 30620), (106, 30665), (110, 30683), (112, 30692), (114, 30707), (138, 30833),

Gene: OverHedge_35 Start: 22595, Stop: 23809, Start Num: 12
Candidate Starts for OverHedge_35:
(8, 22496), (Start: 12 @22595 has 34 MA's), (15, 22697), (16, 22703), (45, 22913), (63, 23084), (64, 23099), (68, 23210), (75, 23339), (77, 23396), (79, 23402), (87, 23456), (111, 23597), (114, 23618), (125, 23657),

Gene: Paschalis_42 Start: 29988, Stop: 30893, Start Num: 42
Candidate Starts for Paschalis_42:
(Start: 42 @29988 has 56 MA's), (45, 30033), (47, 30051), (52, 30084), (61, 30183), (63, 30210), (66, 30249), (69, 30336), (70, 30345), (72, 30387), (76, 30504), (93, 30606), (97, 30627), (106, 30672), (110, 30690), (112, 30699), (114, 30714), (130, 30783), (131, 30804), (138, 30840), (139, 30849),

Gene: PastaFagioli_22 Start: 18029, Stop: 18781, Start Num: 46
Candidate Starts for PastaFagioli_22:
(Start: 46 @18029 has 41 MA's), (52, 18071), (69, 18323), (71, 18347), (78, 18503), (83, 18536), (84, 18545), (85, 18548), (104, 18662), (106, 18674), (117, 18737), (123, 18764),

Gene: Pecas_22 Start: 18025, Stop: 18777, Start Num: 46
Candidate Starts for Pecas_22:
(44, 17989), (Start: 46 @18025 has 41 MA's), (52, 18067), (69, 18319), (71, 18343), (78, 18502), (83, 18535), (85, 18547), (119, 18742), (123, 18760),

Gene: Penta_22 Start: 16685, Stop: 17551, Start Num: 38
Candidate Starts for Penta_22:
(Start: 38 @16685 has 13 MA's), (45, 16739), (52, 16790), (54, 16799), (59, 16859), (60, 16874), (63, 16916), (65, 16949), (79, 17210), (85, 17246), (90, 17279), (114, 17426),

Gene: PermaG_28 Start: 20672, Stop: 21523, Start Num: 42
Candidate Starts for PermaG_28:
(31, 20633), (Start: 42 @20672 has 56 MA's), (45, 20717), (79, 21185), (85, 21221), (93, 21281), (111, 21368),

Gene: Pharpay_35 Start: 22650, Stop: 23864, Start Num: 12
Candidate Starts for Pharpay_35:
(8, 22551), (Start: 12 @22650 has 34 MA's), (15, 22752), (16, 22758), (45, 22968), (63, 23139), (64, 23154), (68, 23265), (75, 23394), (77, 23451), (79, 23457), (87, 23511), (111, 23652), (114, 23673), (125, 23712),

Gene: PhedwardCullen_41 Start: 29739, Stop: 30644, Start Num: 42
Candidate Starts for PhedwardCullen_41:
(Start: 42 @29739 has 56 MA's), (45, 29784), (47, 29802), (52, 29835), (61, 29934), (63, 29961), (66, 30000), (70, 30096), (72, 30138), (76, 30255), (93, 30357), (97, 30378), (106, 30423), (110, 30441), (112, 30450), (114, 30465), (138, 30591),

Gene: PhigPhack_23 Start: 18021, Stop: 18770, Start Num: 46
Candidate Starts for PhigPhack_23:
(13, 17697), (Start: 46 @18021 has 41 MA's), (51, 18057), (52, 18063), (60, 18147), (69, 18315), (71, 18339), (78, 18495), (83, 18528), (84, 18537), (85, 18540), (104, 18654), (106, 18666), (124, 18756), (125, 18765),

Gene: PhillyJawn_29 Start: 18483, Stop: 19376, Start Num: 40
Candidate Starts for PhillyJawn_29:

(Start: 40 @18483 has 11 MA's), (45, 18531), (58, 18648), (59, 18651), (60, 18666), (68, 18834), (79, 19014), (93, 19113), (99, 19143), (109, 19197), (113, 19218), (136, 19344),

Gene: Phingu_31 Start: 18696, Stop: 19577, Start Num: 40
Candidate Starts for Phingu_31:
(Start: 40 @18696 has 11 MA's), (45, 18744), (58, 18861), (59, 18864), (60, 18879), (61, 18894), (79, 19224), (81, 19236), (85, 19260), (93, 19320), (104, 19377), (136, 19545),

Gene: Phisb_22 Start: 18038, Stop: 18793, Start Num: 46
Candidate Starts for Phisb_22:
(44, 18002), (Start: 46 @18038 has 41 MA's), (52, 18080), (60, 18164), (69, 18332), (71, 18356), (78, 18515), (83, 18548), (84, 18557), (104, 18674), (123, 18776),

Gene: Phonegingi_28 Start: 18526, Stop: 19389, Start Num: 40
Candidate Starts for Phonegingi_28:
(37, 18517), (Start: 40 @18526 has 11 MA's), (45, 18574), (58, 18691), (59, 18694), (60, 18709), (68, 18871), (79, 19051), (81, 19063), (85, 19087), (93, 19147), (98, 19174), (104, 19204),

Gene: Phorgeous_42 Start: 29851, Stop: 30756, Start Num: 42
Candidate Starts for Phorgeous_42:
(Start: 42 @29851 has 56 MA's), (45, 29896), (47, 29914), (52, 29947), (61, 30046), (63, 30073), (66, 30112), (70, 30208), (72, 30250), (76, 30367), (93, 30469), (97, 30490), (106, 30535), (110, 30553), (112, 30562), (114, 30577), (138, 30703),

Gene: Phrancesco_43 Start: 30141, Stop: 31046, Start Num: 42
Candidate Starts for Phrancesco_43:
(Start: 42 @30141 has 56 MA's), (45, 30186), (47, 30204), (52, 30237), (61, 30336), (63, 30363), (66, 30402), (70, 30498), (72, 30540), (76, 30657), (93, 30759), (97, 30780), (106, 30825), (110, 30843), (112, 30852), (114, 30867), (138, 30993),

Gene: PhunaPhoke_35 Start: 22623, Stop: 23837, Start Num: 12
Candidate Starts for PhunaPhoke_35:
(Start: 12 @22623 has 34 MA's), (15, 22725), (16, 22731), (45, 22941), (63, 23112), (64, 23127), (68, 23238), (75, 23367), (77, 23424), (79, 23430), (87, 23484), (111, 23625), (114, 23646), (125, 23685),

Gene: Pickles13_28 Start: 18911, Stop: 19798, Start Num: 40
Candidate Starts for Pickles13_28:
(14, 18692), (17, 18767), (Start: 40 @18911 has 11 MA's), (45, 18959), (58, 19076), (60, 19094), (61, 19109), (68, 19256), (75, 19385), (79, 19436), (81, 19448), (90, 19508), (93, 19535), (109, 19619), (113, 19640), (128, 19712), (136, 19766),

Gene: PierreOrion_43 Start: 30155, Stop: 31060, Start Num: 42
Candidate Starts for PierreOrion_43:
(Start: 42 @30155 has 56 MA's), (45, 30200), (47, 30218), (61, 30350), (63, 30377), (66, 30416), (68, 30494), (70, 30512), (72, 30554), (76, 30671), (93, 30773), (97, 30794), (106, 30839), (110, 30857), (112, 30866), (114, 30881), (130, 30950), (138, 31007),

Gene: PiperSansNom_43 Start: 30295, Stop: 31200, Start Num: 42
Candidate Starts for PiperSansNom_43:
(Start: 42 @30295 has 56 MA's), (45, 30340), (47, 30358), (52, 30391), (61, 30490), (63, 30517), (66, 30556), (70, 30652), (72, 30694), (76, 30811), (93, 30913), (97, 30934), (106, 30979), (110, 30997), (112, 31006), (114, 31021), (138, 31147),

Gene: Piperis_43 Start: 29974, Stop: 30879, Start Num: 42
Candidate Starts for Piperis_43:
(Start: 42 @29974 has 56 MA's), (45, 30019), (47, 30037), (52, 30070), (61, 30169), (63, 30196), (66, 30235), (68, 30313), (72, 30373), (76, 30490), (81, 30505), (93, 30592), (97, 30613), (99, 30622), (106, 30658), (110, 30676), (112, 30685), (114, 30700), (130, 30769), (138, 30826),

Gene: Potty_35 Start: 22628, Stop: 23842, Start Num: 12
Candidate Starts for Potty_35:
(8, 22529), (Start: 12 @22628 has 34 MA's), (15, 22730), (16, 22736), (45, 22946), (63, 23117), (64, 23132), (68, 23243), (75, 23372), (77, 23429), (79, 23435), (87, 23489), (111, 23630), (114, 23651), (125, 23690),

Gene: Poultress_34 Start: 22999, Stop: 24189, Start Num: 12
Candidate Starts for Poultress_34:
(Start: 12 @22999 has 34 MA's), (15, 23101), (16, 23107), (45, 23317), (63, 23488), (64, 23503), (68, 23614), (77, 23800), (79, 23806), (87, 23860), (111, 24001), (114, 24022), (121, 24046), (125, 24061),

Gene: Pulchra_44 Start: 30371, Stop: 31276, Start Num: 42
Candidate Starts for Pulchra_44:
(33, 30344), (Start: 42 @30371 has 56 MA's), (45, 30416), (47, 30434), (52, 30467), (61, 30566), (63, 30593), (66, 30632), (70, 30728), (72, 30770), (76, 30887), (93, 30989), (97, 31010), (99, 31019), (106, 31055), (110, 31073), (112, 31082), (114, 31097), (138, 31223),

Gene: QMacho_23 Start: 18508, Stop: 19260, Start Num: 46
Candidate Starts for QMacho_23:
(44, 18472), (Start: 46 @18508 has 41 MA's), (52, 18550), (69, 18802), (71, 18826), (78, 18985), (83, 19018), (85, 19030), (119, 19225), (123, 19243),

Gene: QuadZero_23 Start: 16769, Stop: 17638, Start Num: 38
Candidate Starts for QuadZero_23:
(Start: 38 @16769 has 13 MA's), (45, 16814), (53, 16871), (63, 16991), (65, 17024), (79, 17285), (93, 17381), (106, 17462), (110, 17480),

Gene: Quhwah_46 Start: 30603, Stop: 31508, Start Num: 42
Candidate Starts for Quhwah_46:
(Start: 42 @30603 has 56 MA's), (45, 30648), (47, 30666), (52, 30699), (61, 30798), (63, 30825), (66, 30864), (70, 30960), (72, 31002), (76, 31119), (93, 31221), (97, 31242), (106, 31287), (112, 31314), (114, 31329), (138, 31455),

Gene: Rachella_35 Start: 22631, Stop: 23845, Start Num: 12
Candidate Starts for Rachella_35:
(8, 22532), (Start: 12 @22631 has 34 MA's), (15, 22733), (16, 22739), (45, 22949), (63, 23120), (64, 23135), (68, 23246), (75, 23375), (77, 23432), (79, 23438), (87, 23492), (111, 23633), (114, 23654), (125, 23693),

Gene: Ramiel05_42 Start: 30006, Stop: 30911, Start Num: 42
Candidate Starts for Ramiel05_42:
(Start: 42 @30006 has 56 MA's), (45, 30051), (47, 30069), (52, 30102), (61, 30201), (63, 30228), (66, 30267), (70, 30363), (72, 30405), (76, 30522), (93, 30624), (97, 30645), (106, 30690), (110, 30708), (112, 30717), (114, 30732), (138, 30858),

Gene: Rasovi_27 Start: 20662, Stop: 21537, Start Num: 42
Candidate Starts for Rasovi_27:

(Start: 42 @20662 has 56 MA's), (45, 20707), (54, 20767), (79, 21178), (85, 21214), (93, 21274), (110, 21373),

Gene: Rie18_35 Start: 22145, Stop: 23332, Start Num: 12
Candidate Starts for Rie18_35:
(10, 22100), (Start: 12 @22145 has 34 MA's), (15, 22247), (16, 22253), (45, 22457), (64, 22643), (68, 22754), (77, 22940), (79, 22946), (87, 23000), (111, 23141), (114, 23162), (125, 23201),

Gene: Rockwell_42 Start: 30006, Stop: 30911, Start Num: 42
Candidate Starts for Rockwell_42:
(Start: 42 @30006 has 56 MA's), (45, 30051), (47, 30069), (52, 30102), (61, 30201), (62, 30216), (63, 30228), (66, 30267), (70, 30363), (72, 30405), (76, 30522), (93, 30624), (97, 30645), (106, 30690), (110, 30708), (112, 30717), (114, 30732), (138, 30858),

Gene: Rootkit7_27 Start: 20472, Stop: 21353, Start Num: 42
Candidate Starts for Rootkit7_27:
(Start: 42 @20472 has 56 MA's), (45, 20517), (54, 20577), (61, 20661), (76, 20985), (80, 20991), (85, 21027), (90, 21060), (92, 21075), (106, 21153), (111, 21174), (112, 21180), (114, 21195), (122, 21219), (125, 21234), (129, 21258), (137, 21309),

Gene: SBlackberry_27 Start: 20472, Stop: 21347, Start Num: 42
Candidate Starts for SBlackberry_27:
(Start: 42 @20472 has 56 MA's), (43, 20484), (45, 20517), (52, 20568), (76, 20982), (85, 21024), (90, 21057), (93, 21084), (106, 21150), (111, 21171), (114, 21192), (129, 21255),

Gene: SansAfet_22 Start: 17955, Stop: 18704, Start Num: 46
Candidate Starts for SansAfet_22:
(13, 17631), (Start: 46 @17955 has 41 MA's), (51, 17991), (52, 17997), (60, 18081), (69, 18249), (71, 18273), (78, 18429), (83, 18462), (84, 18471), (85, 18474), (104, 18588), (106, 18600), (124, 18690), (125, 18699),

Gene: SarBear_22 Start: 18006, Stop: 18758, Start Num: 46
Candidate Starts for SarBear_22:
(44, 17970), (Start: 46 @18006 has 41 MA's), (52, 18048), (69, 18300), (71, 18324), (78, 18483), (83, 18516), (85, 18528), (119, 18723), (123, 18741),

Gene: Savannah_42 Start: 30033, Stop: 30938, Start Num: 42
Candidate Starts for Savannah_42:
(Start: 42 @30033 has 56 MA's), (45, 30078), (47, 30096), (52, 30129), (61, 30228), (63, 30255), (66, 30294), (70, 30390), (72, 30432), (76, 30549), (93, 30651), (97, 30672), (106, 30717), (110, 30735), (112, 30744), (114, 30759), (138, 30885),

Gene: Schimmels22_23 Start: 17213, Stop: 18079, Start Num: 38
Candidate Starts for Schimmels22_23:
(Start: 38 @17213 has 13 MA's), (45, 17267), (52, 17318), (54, 17327), (60, 17402), (63, 17444), (65, 17477), (79, 17738), (85, 17774), (90, 17807), (93, 17834), (114, 17954),

Gene: Scissor2024_23 Start: 16849, Stop: 17715, Start Num: 38
Candidate Starts for Scissor2024_23:
(Start: 38 @16849 has 13 MA's), (45, 16903), (54, 16963), (60, 17038), (63, 17080), (79, 17374), (85, 17410), (90, 17443), (93, 17470), (114, 17590),

Gene: ScoobySnack_27 Start: 18616, Stop: 19515, Start Num: 40

Candidate Starts for ScoobySnack_27:
(Start: 40 @18616 has 11 MA's), (45, 18664), (59, 18784), (60, 18799), (64, 18856), (68, 18961), (79, 19147), (90, 19216), (93, 19243), (102, 19294), (105, 19315), (107, 19330), (108, 19342), (113, 19363), (136, 19477),

Gene: Scumberland_44 Start: 30228, Stop: 31133, Start Num: 42
Candidate Starts for Scumberland_44:
(Start: 42 @30228 has 56 MA's), (45, 30273), (47, 30291), (52, 30324), (61, 30423), (63, 30450), (66, 30489), (70, 30585), (72, 30627), (76, 30744), (93, 30846), (97, 30867), (106, 30912), (110, 30930), (112, 30939), (114, 30954),

Gene: Selwyn23_44 Start: 30205, Stop: 31110, Start Num: 42
Candidate Starts for Selwyn23_44:
(Start: 42 @30205 has 56 MA's), (45, 30250), (47, 30268), (52, 30301), (61, 30400), (63, 30427), (66, 30466), (68, 30544), (72, 30604), (76, 30721), (81, 30736), (93, 30823), (97, 30844), (99, 30853), (106, 30889), (110, 30907), (112, 30916), (114, 30931), (130, 31000), (138, 31057),

Gene: Shotgun_42 Start: 29832, Stop: 30737, Start Num: 42
Candidate Starts for Shotgun_42:
(Start: 42 @29832 has 56 MA's), (45, 29877), (47, 29895), (52, 29928), (61, 30027), (62, 30042), (63, 30054), (66, 30093), (68, 30171), (70, 30189), (72, 30231), (76, 30348), (93, 30450), (97, 30471), (106, 30516), (110, 30534), (112, 30543), (114, 30558), (138, 30684),

Gene: SilentWarrior_34 Start: 21794, Stop: 22918, Start Num: 12
Candidate Starts for SilentWarrior_34:
(9, 21713), (Start: 12 @21794 has 34 MA's), (15, 21896), (45, 22097), (63, 22268), (66, 22307), (68, 22394), (76, 22571), (79, 22577), (93, 22673), (103, 22721), (106, 22739), (111, 22760), (121, 22805), (129, 22844),

Gene: SirBeanington_22 Start: 18045, Stop: 18800, Start Num: 46
Candidate Starts for SirBeanington_22:
(44, 18009), (Start: 46 @18045 has 41 MA's), (52, 18087), (60, 18171), (69, 18339), (71, 18363), (78, 18522), (83, 18555), (84, 18564), (104, 18681), (123, 18783),

Gene: SirFrank_42 Start: 29874, Stop: 30779, Start Num: 42
Candidate Starts for SirFrank_42:
(Start: 42 @29874 has 56 MA's), (45, 29919), (47, 29937), (52, 29970), (62, 30084), (65, 30129), (66, 30135), (70, 30231), (72, 30273), (76, 30390), (93, 30492), (97, 30513), (106, 30558), (110, 30576), (112, 30585), (114, 30600), (138, 30726),

Gene: Slay_22 Start: 18548, Stop: 19300, Start Num: 46
Candidate Starts for Slay_22:
(44, 18512), (Start: 46 @18548 has 41 MA's), (52, 18590), (69, 18842), (71, 18866), (78, 19025), (83, 19058), (85, 19070), (119, 19265), (123, 19283),

Gene: Snakehole_35 Start: 21878, Stop: 23020, Start Num: 12
Candidate Starts for Snakehole_35:
(Start: 12 @21878 has 34 MA's), (15, 21980), (16, 21986), (45, 22190), (63, 22361), (64, 22376), (68, 22487), (76, 22664), (79, 22670), (93, 22766), (106, 22832), (111, 22853), (114, 22874), (129, 22937),

Gene: Softsoap_21 Start: 17779, Stop: 18528, Start Num: 46
Candidate Starts for Softsoap_21:

(1, 16222), (2, 17035), (5, 17254), (13, 17455), (Start: 46 @17779 has 41 MA's), (51, 17815), (60, 17905), (69, 18073), (71, 18097), (78, 18253), (83, 18286), (84, 18295), (85, 18298), (104, 18412), (106, 18424), (125, 18523),

Gene: Solea_24 Start: 18408, Stop: 19157, Start Num: 46
Candidate Starts for Solea_24:
(Start: 46 @18408 has 41 MA's), (51, 18444), (52, 18450), (60, 18534), (69, 18702), (71, 18726), (78, 18882), (83, 18915), (84, 18924), (104, 19041), (106, 19053), (124, 19143), (125, 19152),

Gene: Sucha_24 Start: 18171, Stop: 19043, Start Num: 42
Candidate Starts for Sucha_24:
(34, 18129), (Start: 42 @18171 has 56 MA's), (45, 18216), (65, 18420), (67, 18471), (74, 18606), (76, 18675), (94, 18798), (101, 18834), (116, 18921),

Gene: Sweetums_28 Start: 19136, Stop: 20026, Start Num: 42
Candidate Starts for Sweetums_28:
(21, 19034), (27, 19076), (41, 19133), (Start: 42 @19136 has 56 MA's), (45, 19181), (52, 19232), (55, 19244), (66, 19397), (67, 19442), (69, 19484), (72, 19535), (73, 19538), (79, 19658), (86, 19700), (90, 19727), (93, 19754), (106, 19820), (110, 19838), (111, 19841), (114, 19862), (122, 19898), (138, 19988),

Gene: Swervy_22 Start: 18006, Stop: 18758, Start Num: 46
Candidate Starts for Swervy_22:
(44, 17970), (Start: 46 @18006 has 41 MA's), (52, 18048), (69, 18300), (71, 18324), (78, 18483), (83, 18516), (85, 18528), (119, 18723), (123, 18741),

Gene: Tedro_35 Start: 22101, Stop: 23315, Start Num: 12
Candidate Starts for Tedro_35:
(8, 22002), (Start: 12 @22101 has 34 MA's), (15, 22203), (16, 22209), (45, 22419), (63, 22590), (64, 22605), (68, 22716), (75, 22845), (77, 22902), (79, 22908), (87, 22962), (111, 23103), (114, 23124), (125, 23163),

Gene: Teng_30 Start: 19074, Stop: 19958, Start Num: 42
Candidate Starts for Teng_30:
(27, 19014), (41, 19071), (Start: 42 @19074 has 56 MA's), (45, 19119), (52, 19170), (55, 19182), (66, 19335), (67, 19380), (69, 19422), (72, 19473), (73, 19476), (79, 19596), (86, 19638), (90, 19665), (93, 19692), (106, 19758), (110, 19776), (111, 19779), (114, 19800), (128, 19872), (138, 19926),

Gene: Tinyman4_23 Start: 16850, Stop: 17716, Start Num: 38
Candidate Starts for Tinyman4_23:
(Start: 38 @16850 has 13 MA's), (45, 16904), (52, 16955), (54, 16964), (60, 17039), (63, 17081), (65, 17114), (75, 17324), (79, 17375), (85, 17411), (90, 17444), (93, 17471), (114, 17591),

Gene: Tongui_34 Start: 22129, Stop: 23271, Start Num: 12
Candidate Starts for Tongui_34:
(Start: 12 @22129 has 34 MA's), (15, 22231), (16, 22237), (45, 22447), (63, 22618), (64, 22633), (68, 22744), (76, 22918), (79, 22924), (106, 23086), (110, 23104), (129, 23191),

Gene: TukTuk_22 Start: 18064, Stop: 18816, Start Num: 46
Candidate Starts for TukTuk_22:
(44, 18028), (Start: 46 @18064 has 41 MA's), (52, 18106), (69, 18358), (71, 18382), (78, 18541), (83, 18574), (85, 18586), (119, 18781), (123, 18799),

Gene: TurboVicky_27 Start: 20471, Stop: 21352, Start Num: 42
Candidate Starts for TurboVicky_27:
(Start: 42 @20471 has 56 MA's), (45, 20516), (54, 20576), (61, 20660), (76, 20984), (80, 20990), (85, 21026), (90, 21059), (92, 21074), (106, 21152), (111, 21173), (112, 21179), (114, 21194), (122, 21218), (125, 21233), (129, 21257), (137, 21308),

Gene: TwoBits_22 Start: 17147, Stop: 18016, Start Num: 38
Candidate Starts for TwoBits_22:
(Start: 38 @17147 has 13 MA's), (43, 17168), (45, 17201), (54, 17261), (60, 17336), (61, 17351), (65, 17411), (79, 17672), (85, 17708), (90, 17741), (114, 17888),

Gene: Typher_29 Start: 20600, Stop: 21481, Start Num: 42
Candidate Starts for Typher_29:
(29, 20534), (Start: 42 @20600 has 56 MA's), (45, 20645), (54, 20705), (61, 20789), (76, 21113), (80, 21119), (85, 21155), (90, 21188), (92, 21203), (106, 21281), (111, 21302), (112, 21308), (114, 21323), (122, 21347), (125, 21362), (129, 21386), (137, 21437),

Gene: Violeta_30 Start: 18581, Stop: 19474, Start Num: 40
Candidate Starts for Violeta_30:
(35, 18548), (Start: 40 @18581 has 11 MA's), (45, 18629), (58, 18746), (59, 18749), (60, 18764), (68, 18932), (79, 19112), (93, 19211), (99, 19241), (109, 19295), (113, 19316), (136, 19442),

Gene: Wardwill_25 Start: 16927, Stop: 17796, Start Num: 38
Candidate Starts for Wardwill_25:
(Start: 38 @16927 has 13 MA's), (45, 16972), (53, 17029), (63, 17149), (65, 17182), (79, 17443), (93, 17539), (106, 17620), (110, 17638),

Gene: Warren_29 Start: 18684, Stop: 19574, Start Num: 40
Candidate Starts for Warren_29:
(37, 18675), (Start: 40 @18684 has 11 MA's), (45, 18732), (58, 18849), (59, 18852), (60, 18867), (68, 19029), (79, 19212), (93, 19311), (109, 19395), (113, 19416), (128, 19488), (136, 19542),

Gene: WestPM_22 Start: 16694, Stop: 17560, Start Num: 38
Candidate Starts for WestPM_22:
(Start: 38 @16694 has 13 MA's), (45, 16748), (52, 16799), (54, 16808), (59, 16868), (60, 16883), (63, 16925), (65, 16958), (79, 17219), (85, 17255), (90, 17288), (114, 17435),

Gene: Winchester007_44 Start: 24601, Stop: 25494, Start Num: 40
Candidate Starts for Winchester007_44:
(Start: 40 @24601 has 11 MA's), (45, 24649), (58, 24766), (59, 24769), (60, 24784), (68, 24952), (79, 25132), (93, 25231), (99, 25261), (109, 25315), (113, 25336), (136, 25462),

Gene: Wrackline_34 Start: 20389, Stop: 21276, Start Num: 42
Candidate Starts for Wrackline_34:
(19, 20272), (20, 20284), (Start: 42 @20389 has 56 MA's), (43, 20401), (45, 20434), (52, 20485), (53, 20491), (67, 20695), (73, 20791), (74, 20833), (75, 20854), (79, 20899), (93, 20998), (110, 21082), (114, 21106), (120, 21136),

Gene: Yeti_43 Start: 30007, Stop: 30912, Start Num: 42
Candidate Starts for Yeti_43:
(Start: 42 @30007 has 56 MA's), (45, 30052), (47, 30070), (52, 30103), (61, 30202), (63, 30229), (66, 30268), (68, 30346), (72, 30406), (76, 30523), (81, 30538), (93, 30625), (97, 30646), (99, 30655), (106, 30691), (110, 30709), (112, 30718), (114, 30733), (130, 30802), (138, 30859),

Gene: Zanella_27 Start: 20474, Stop: 21355, Start Num: 42
Candidate Starts for Zanella_27:
(Start: 42 @20474 has 56 MA's), (45, 20519), (54, 20579), (61, 20663), (76, 20987), (80, 20993), (85, 21029), (90, 21062), (92, 21077), (106, 21155), (111, 21176), (112, 21182), (114, 21197), (122, 21221), (125, 21236), (129, 21260), (137, 21311),

Gene: Zayuliv_23 Start: 17355, Stop: 18224, Start Num: 38
Candidate Starts for Zayuliv_23:
(Start: 38 @17355 has 13 MA's), (45, 17400), (49, 17433), (53, 17457), (63, 17577), (65, 17610), (79, 17871), (93, 17967), (106, 18048), (110, 18066),

Gene: Zepp_24 Start: 16753, Stop: 17622, Start Num: 38
Candidate Starts for Zepp_24:
(Start: 38 @16753 has 13 MA's), (45, 16798), (53, 16855), (63, 16975), (79, 17269), (93, 17365), (106, 17446), (110, 17464),